### **ENVIRONMENTAL CHEMISTS**

Date of Report: 05/01/03 Date Received: 04/11/03

Project: Metro Self Monitor, PO# M69811, F&BI 304112

Date Extracted: 04/30/03 Date Analyzed: 04/30/03

## RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Results Reported as mg/L (ppm)

Sample ID Laboratory ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M69811 304112-01	1.4	1.3	1.5	0.09
Method Blank	< 0.05	< 0.05	< 0.05	<0.05

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 05/01/03 Date Received: 04/11/03

Project: Metro Self Monitor, PO# M69811, F&BI 304112

# QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 304226-01 (Duplicate)

	Mari Maria	Donouting	Comple	Dunlingt	Relative Percent	Accortonce	
	Analyte	Reporting Units	Sample Result	Duplicate Result	Difference	Acceptance Criteria	
Š	Chromium	mg/L (ppm)	0.48	0.48	0	0-20	1
1	Copper	mg/L (ppm)	0.75	0.75	0	0-20	1
	Nickel	mg/L (ppm)	0.51	0.51	0	0-20	
	Zinc	mg/L (ppm)	0.06	0.08	a	0-20	

Laboratory Code: 304226-01 (Matrix Spike)

	Maria Maria	Reporting	Spike	Sample	% Recovery	Acceptance
	Analyte	Units	Level	Result	MS	Criteria
-	Chromium	mg/L (ppm)	2	0.48	89	80-120
1	Copper	mg/L (ppm)	2	0.75	88	80-120
	Nickel	mg/L (ppm)	4	0.51	88	80-120
	Zinc	mg/L (ppm)	2	0.06	91	80-120

Laboratory Code: Laboratory Control Sample

	Reporting	Spike	% Recov	ery % Reco	overy	Acceptance	$\mathbf{e}$ RPI	)
Analyte	Units	Level	LCS	LCS	SD	Criteria	(Limit	20)
Chromium	mg/L (ppm)	2	93	96	3	80-120	3	
Copper	mg/L (ppm)	2	95	97		80-120	2	
Nickel	mg/L (ppm)	4	93	95	j	80-120	2	
Zinc	mg/L (ppm)	2	92	96	}	80-120	4	

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

May 1, 2003

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on April 11, 2003 from the Metro Self Monitor, PO# M69811, F&BI 304112 project. There are 2 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Charlene Morrow

Charlene Morrow

Chemist

Enclosures ACU0501R.DOC

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James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

May 1, 2003

#### **DUPLICATE COPY**

#### **INVOICE # 03ACU0501-1**

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M69811, F&BI 304112 - Results of testing requested by Gerry Thompson for material submitted on April 11, 2003.

I sample analyzed for Total Chromium, Copper, Nickel and Zinc		
by Method 6010B @ \$80 per sample		\$ 80.00
BENERAL BENERAL BENERAL SERVICE		
Amount Due	stille.	\$ 80.00

FEDERAL TAX ID #(b) (6)

304112 SAI	MPLE CHAIN OF CUSTODY	CM OG	1/11/03 AL1
Send Report To G-Thompson  Company ALASKAN Copper works  Address 628 S. Harbord ST	PROJECT NAME/NO.  MESTRO SELF Monitor	PO# MG981/	Page # of  TURNAROUND TIME  Standard (2 Weeks)  RUSH  Rush charges authorized by:
City, State, ZIP_SEATHE und S8174  Phone # 206-382-8779 Fax # 206-382-4709	REMARKS		SAMPLE DISPOSAL  Dispose after 30 days Return samples Will call with instructions

						ANALYSES REQUESTED												
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by $8260$	SVOCs by 8270	HFS	Ol. Cu, ri, 22						Notes
M69811	01	4/11/03	Stoan	H2O	/							J						
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